

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(Rev. 2-32) PATENT AND TRADEMARK OFFICE

: ATTY. DOCKET NO. : SERIAL NO.
: :
: 1836.024844 : 236,724

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

: APPLICANT
: :
: Michael Mezei et al.

(Use several sheets if necessary)

: FILING DATE : GROUP
: :
: August 26, 1988 :

U.S. PATENT DOCUMENTS

EXAMINER	DOCUMENT	DATE	NAME	CLASS	SUBCLASS	FILING DATE
INITIAL	NUMBER	DATE	NAME	CLASS	SUBCLASS	IF APPROPRIATE
<i>QDP</i>	3,645,911	2/1972	van Vesauw et al.	264	4.6	
<i>QDP</i>	3,804,776	4/1974	Yazawa et al.	427	213.3	
<i>PDP</i>	4,016,100	4/1977	Suzuki et al.	264	4.3	
<i>PDP</i>	4,048,310	9/1977	Chen et al.	514	873.3	
<i>PDP</i>	4,089,801	5/1978	Schneider	264	4.1	
<i>PDP</i>	4,235,871	11/1980	Papahadjopoulos et al.	264	4.6	
<i>PDP</i>	4,342,826	8/1982	Cole	436	7	
<i>PDP</i>	4,438,052	3/1984	Weder et al.	264	4.6	
<i>JFG</i>	4,485,054	11/1984	Mezei et al.	264	4.6	
<i>PDP</i>	4,532,089	7/1985	MacDonald	264	4.3	

FOREIGN PATENT DOCUMENTS

EXAMINER	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
INITIAL	NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES : NO
<i>GBX</i>	2050833A	1/1981	United Kingdom			
<i>DEX</i>	DE3335701A1	4/1981	West Germany			X
<i>EPX</i>	0084898	8/1983	European (Patent Appln.)			
<i>WOX</i>	WO85/03640	8/1985	PCT - Int'l. Appln.			
<i>EPX</i>	85/306641.8	4/1987	European Search Report (Appln.)			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>PDP</i>	: Bangham et al., "Diffusion of Univalent Ions Across the Lamellae of Swollen
<i>PDP</i>	: Phospholipids", J. Mol. Biol. 13:238-252 (1965)
<i>PDP</i>	: Bangham et al., "Osmotic Properties and Water Permeability of Phospholipid
<i>PDP</i>	: Lipid Crystals, Chem. Phys. Lipids, 1:225-246 (1967)
<i>PDP</i>	: Batzri et al., "Single Bilayer Liposomes Prepared Without Sonication",
<i>PDP</i>	: Biochim. et Biophys. Acta, 298:1015-1019

EXAMINER *P. Prater* : DATE CONSIDERED *5/11/89*

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LP : : Bangham et al., "Preparation and Use of Liposomes as Models of Biological
 : : Membranes", Methods in Membrane Biology, 6 (London 1974)
 LP : : Papahadjopoulos et al., "Effects of Local Anesthetics on Membrane
 : : Properties", Biochim et Biophys. Acta, 394:504-519 (1975)
 LP : : Theoharides, "Lipsomes as Carriers of Biologically Active Molecules",
 : : Folia Bioch. et Boil. Graeca, Special Issue, Vol XIV, pp. 11-21 (1978)

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

RLP : : : Mezei et al., "Liposomes - A Selective Drug Delivery System for the Topical
RLP : : : Route of Administration", Life Sciences, Vol 26, pp. 1473-1477 (1980)
RLP : : : Okano et al. "Duration of the Local Anesthetic Action of Dibucaine by Liposomes
RLP : : : and Its Mechanism", Yakugaku Zasshi, Vol. 100 (11) pp. :097-1103 (1980)
RLP : : : Chemical Abstracts, Vol. 97, No. 22 (1982), Abstract No. 188156k

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[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

NFD : : "The Effect of Local Anaesthetics on the Osmotic Fragility of Liposomes",
 : : Biochemical Pharmacology, Vol. 31, No. 18, pp. 2999-3000 (1982)
 PLD : : Mezei et al., "Liposomes-A Selective Drug Delivery System for the Topical Route
 : : of Administration: Gel Dosage Form", J. Pharm. Pharmacol., 1982, 34:473-474
 PLP : : Cecil - "Textbook of Medicine", Vol. 1 (1982), pp. 1276-1278
 : : 13 14

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: :Seelig, Biochimica et Biophysica Acta 899 (1987) 296-204

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: :Kuroda et al., Biochimica et Biophysica Acta 903 (1987) 395-410

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: :Bianconi et al., Biochemical and Biophysical Research Communications,

: :Vol. 152(1):344-350 (1988)

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

PLP : Seelig et al., Biochimica et Biophysica Acta 939 (1988) 267-276
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PLP : Gesztes et al., Topical Anesthesia of the Skin by Liposome-Encapsulated
Tetracaine, Anesth Analg, Vol. 67:1079-1081 (1988)

PLP : Mezei, "Liposomes in the Topical Application of Drugs: a Review", Liposomes as
Drug Carriers, Edited by G.. Gregoriadis, John Wiley & Sons Ltd., NY (1988) pp.
663-677

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LIST OF PRIOR ART CITED BY APPLICANT

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1836.023906

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Michael Mezei

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
PLP	AA	3 6 4 5 9 1 1	2/29/72	van Vesauw et al.	264	4.6	
	AB	3 8 0 4 7 7 6	4/16/74	Yazawa et al.	427	213.3	
	AC	4 0 1 6 1 0 0	4/5/77	Suzuki et al.	264	4.3	
	AD	4 0 4 8 3 1 0	9/77	Chen et al.	514	873-X	
	AE	4 0 8 9 8 0 1	5/16/78	Schneider	264	4.1	
	AF	4 2 3 5 8 7 1	11/25/80	Papahadjopoulos et al.	264	4.6-X	
	AG	4 3 4 2 8 2 6	8/82	Cole	436	7	
	AH	4 4 3 8 0 5 2	3/20/84	Weder et al.	264	4.6	
	AI	4 4 8 5 0 5 4	11/27/84	Mezei et al.	264	4.6	
	AJ	4 5 3 2 0 8 9	7/19/85	MacDonald	264	4.3	
	AK						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
PLP	AL	2 0 5 0 8 3 3 A	1/81	United Kingdom				
	AM	DE 3 3 3 5 7 0 1 A 1	4/81	West Germany				X
	AN	0 0 8 4 8 9 8	8/83	European (Patent Appln.)				
	AO	WO 8 5 0 3 6 4 0	8/85	PCT - International Appln.				
	AP	85 3 0 6 6 4 1 3	4/87	European Search Report (Appln.)				

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PLP	AR	Bangham, et al., Methods in Membrane Biology, 6 (London 1974)
PLP	AS	Bangham, et al., Chem. Phys. Lipids 1:225-246 (1967)
PLP	AT	Cecil - "Textbook of Medicine", Vol. 1 (1982), pp. 1276-1278

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL							
	AM							
	AN							
	AO							
	AP							

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PLO	AR	Chemical Abstracts, Vol. 97, No. 22 (1982), Abstract No. 188156k
PLO	AS	Theoharides, "Liposomes as Carriers of Biologically Active Molecules", <u>Folia Bioch. et Biol. Graeca</u> , Special Issue, Vol. XIV, pp. 11-21 (1978)
PLO	AT	Mezei et al., <u>Life Sciences</u> , Vol. 26, pp. 1473-1477 (1980)

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	AR		Mezei, "Liposomes - A Selective Drug Delivery System for the Topical Route of Administration: Gel Dosage Form", <u>J. Pharm. Pharmacol.</u> , 1982, 34:473-474
	AS		
	AT		

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